

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: PORTFOLIO

Report Number: P248367

Luminaire Tested: **LSR8B120D010 EC8B120850 8LBDW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248367  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B120D010 EC8B120850 8LBDWOLI  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13125.0 lumens  
Efficiency: N/A  
Efficacy: 110.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

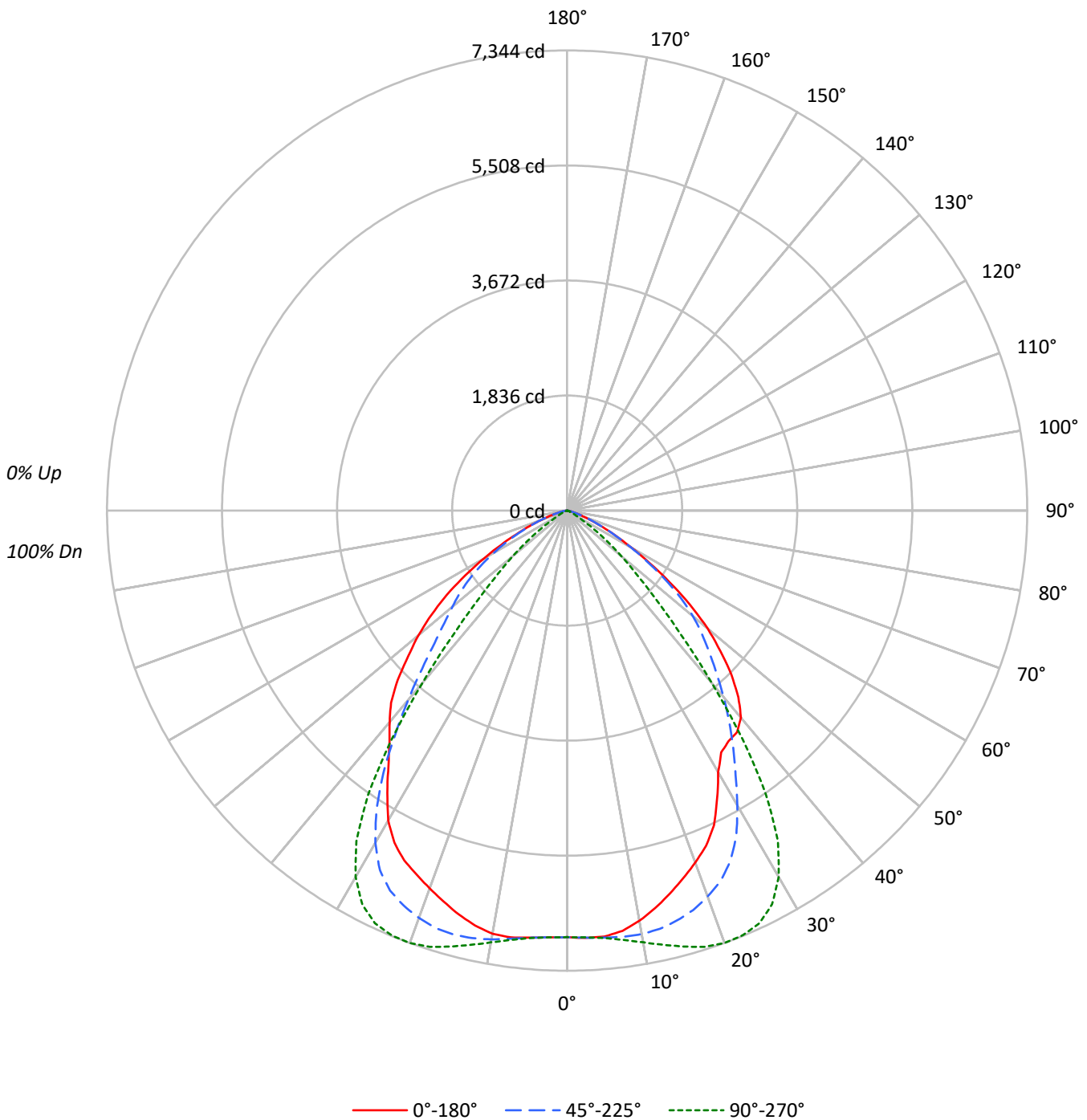
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P248367

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0LI

### Luminous Intensity Polar Plot





TEST NUMBER: P248367

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0LI

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	209958	209958	209958
5°	211209	211992	211766
10°	208106	219084	214785
15°	202022	229940	213097
20°	196157	240986	210507
25°	188626	247158	209531
30°	171664	240381	203318
35°	169105	208289	187065
40°	173704	144459	177339
45°	161703	87310	166748
50°	140258	53917	148581
55°	107636	28171	126098
60°	73329	11366	95173
65°	45618	5801	65661
70°	24767	3588	40076
75°	12915	1716	23686
80°	5771	1936	12821
85°	3856	1274	11499



TEST NUMBER: P248367

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDWOLI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	654.8	5.0
10°-20°	1939.7	14.8
20°-30°	2959.3	22.5
30°-40°	3088.0	23.5
40°-50°	2319.5	17.7
50°-60°	1427.1	10.9
60°-70°	580.8	4.4
70°-80°	136.8	1.0
80°-90°	18.9	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	5553.8	42.3
0°-40°	8641.8	65.8
0°-60°	12388.5	94.4
0°-90°	13125.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13125.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	6809	6809	6809	6809	6809	
5°	6823	6841	6849	6841	6841	646
15°	6328	6773	7203	7004	6675	1783
25°	5544	6166	7264	6690	6158	2520
35°	4492	4619	5533	5114	4969	2836
45°	3708	3209	2002	2989	3824	2829
55°	2002	1901	524	1901	2346	1800
65°	625	632	80	849	900	652
75°	108	108	14	192	199	131
85°	11	11	4	25	32	15
90°	0	0	0	0	0	



TEST NUMBER: P248367

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDWOLI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8
2.5°	6826.9	6816.0	6826.9	6826.9	6830.5	6823.3	6826.9	6830.5	6823.3	6823.3	6823.3
5°	6823.3	6816.0	6823.3	6819.7	6826.9	6826.9	6834.2	6834.2	6841.3	6841.3	6852.2
7.5°	6765.5	6751.0	6765.5	6776.3	6783.5	6798.0	6816.0	6830.5	6845.0	6859.5	6877.5
10°	6646.2	6646.2	6657.0	6678.7	6700.4	6725.7	6758.2	6794.4	6830.5	6863.0	6895.5
12.5°	6498.0	6487.2	6508.8	6537.8	6570.3	6610.1	6660.7	6714.9	6772.7	6837.7	6888.4
15°	6328.2	6317.3	6342.6	6371.5	6411.3	6469.1	6530.6	6602.8	6686.0	6772.7	6855.8
17.5°	6154.7	6151.1	6176.3	6216.1	6248.7	6310.0	6389.6	6476.3	6570.3	6686.0	6794.4
20°	5977.6	5974.0	5999.3	6031.8	6075.2	6133.0	6212.5	6313.7	6425.7	6555.9	6682.3
22.5°	5793.3	5796.9	5818.6	5854.7	5890.9	5952.3	6035.4	6136.6	6259.5	6400.4	6541.4
25°	5543.9	5525.9	5554.8	5590.9	5652.3	5702.9	5782.5	5890.9	6017.3	6165.6	6331.8
27.5°	5182.5	5178.9	5204.2	5236.7	5290.9	5352.4	5439.1	5551.1	5684.9	5847.5	6010.1
30°	4821.1	4828.3	4839.2	4871.7	4907.8	4969.3	5056.0	5150.0	5276.5	5431.9	5605.4
32.5°	4575.3	4575.3	4589.8	4611.5	4636.8	4669.3	4730.8	4799.4	4897.0	5005.4	5131.9
35°	4492.2	4477.8	4492.2	4495.8	4499.5	4506.7	4517.5	4539.2	4571.7	4618.7	4665.7
37.5°	4456.1	4445.2	4445.2	4430.8	4412.7	4391.0	4362.1	4329.6	4293.5	4246.5	4210.4
40°	4315.2	4307.9	4300.7	4286.3	4246.5	4203.1	4156.1	4080.2	3997.1	3881.4	3765.8
42.5°	4044.1	4036.9	4033.3	4004.3	3968.2	3917.6	3863.4	3783.9	3679.1	3530.9	3364.6
45°	3708.0	3693.5	3682.7	3657.4	3632.1	3588.7	3538.1	3465.8	3361.0	3209.3	3010.5
47.5°	3317.7	3310.4	3306.8	3296.0	3270.7	3245.4	3212.9	3155.1	3061.1	2916.5	2710.5
50°	2923.7	2909.3	2916.5	2912.9	2902.1	2884.0	2862.3	2822.6	2750.2	2620.2	2432.2
52.5°	2472.0	2472.0	2468.4	2479.2	2482.8	2479.2	2482.8	2439.5	2378.0	2280.4	2121.4
55°	2002.1	2002.1	2013.0	2027.5	2041.9	2045.5	2041.9	2023.9	1980.5	1901.0	1760.0
57.5°	1561.2	1554.1	1575.7	1597.4	1611.9	1626.3	1615.4	1601.0	1575.7	1510.6	1402.2
60°	1189.0	1189.0	1203.4	1217.9	1232.4	1246.9	1243.2	1239.6	1217.9	1174.5	1087.9
62.5°	874.6	878.2	878.2	889.1	903.5	918.0	928.8	918.0	907.1	878.2	820.4
65°	625.2	621.6	625.2	636.1	646.9	661.4	668.6	665.0	654.1	632.4	589.1
67.5°	419.2	415.6	430.0	433.7	440.9	455.4	451.8	455.4	451.8	433.7	397.6
70°	274.7	267.4	274.7	271.0	281.9	285.5	292.7	296.3	292.7	281.9	271.0
72.5°	169.9	166.2	169.9	173.5	177.1	180.7	187.9	187.9	184.3	177.1	162.6
75°	108.4	97.5	101.2	94.0	101.2	101.2	108.4	112.0	108.4	108.4	101.2
77.5°	65.1	65.1	65.1	65.1	65.1	65.1	65.1	68.7	72.2	65.1	61.5
80°	32.5	32.5	36.2	36.2	36.2	39.8	36.2	36.2	36.2	39.8	28.9
82.5°	25.3	21.7	21.7	21.7	25.3	21.7	21.7	21.7	21.7	21.7	21.7
85°	10.9	14.4	10.9	7.3	10.9	10.9	14.4	10.9	10.9	10.9	14.4
87.5°	3.6	3.6	0.0	0.0	0.0	3.6	0.0	3.6	3.6	7.3	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P248367

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDWOLI

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8
2.5°	6826.9	6819.7	6819.7	6816.0	6823.3	6816.0	6819.7	6816.0	6816.0	6823.3	6816.0
5°	6852.2	6855.8	6848.6	6845.0	6855.8	6855.8	6855.8	6848.6	6848.6	6852.2	6848.6
7.5°	6888.4	6895.5	6899.2	6902.8	6910.0	6913.7	6913.7	6910.0	6906.4	6917.3	6902.8
10°	6928.1	6939.0	6960.6	6971.5	6989.5	6989.5	6996.8	6996.8	6989.5	6996.8	6993.2
12.5°	6913.7	6978.7	7014.8	7040.1	7065.4	7087.1	7094.3	7097.9	7094.3	7108.8	7094.3
15°	6939.0	6993.2	7051.0	7094.3	7141.3	7166.6	7173.8	7202.7	7210.0	7213.6	7191.9
17.5°	6899.2	6996.8	7058.2	7123.2	7191.9	7238.9	7282.2	7300.4	7304.0	7311.2	7282.2
20°	6808.8	6917.3	7011.2	7105.2	7184.7	7256.9	7293.1	7343.7	7329.3	7358.2	7318.4
22.5°	6686.0	6808.8	6928.1	7051.0	7134.1	7220.9	7296.7	7332.8	7350.9	7350.9	7307.5
25°	6490.8	6635.4	6765.5	6891.9	7018.5	7123.2	7210.0	7264.2	7275.1	7271.4	7220.9
27.5°	6187.2	6342.6	6494.4	6639.0	6794.4	6917.3	7018.5	7083.4	7101.6	7101.6	7047.4
30°	5768.0	5934.2	6082.4	6255.8	6414.9	6552.3	6693.2	6751.0	6783.5	6783.5	6722.1
32.5°	5269.2	5410.2	5547.5	5717.4	5890.9	6046.3	6180.0	6259.5	6299.3	6295.6	6241.4
35°	4727.2	4795.8	4900.7	5027.1	5182.5	5327.1	5457.1	5533.1	5601.7	5598.1	5547.5
37.5°	4185.0	4167.0	4177.8	4224.8	4322.3	4423.6	4524.7	4597.1	4654.8	4680.2	4669.3
40°	3653.8	3559.8	3469.4	3437.0	3444.1	3480.3	3534.5	3588.7	3653.8	3686.3	3700.8
42.5°	3176.7	3017.7	2858.7	2739.4	2670.7	2649.1	2674.4	2692.4	2732.2	2779.2	2826.2
45°	2793.7	2580.5	2370.8	2186.5	2070.8	2002.1	1987.7	2002.1	2023.9	2070.8	2132.3
47.5°	2479.2	2229.8	1995.0	1788.9	1619.1	1528.8	1503.5	1496.2	1517.9	1561.2	1644.3
50°	2200.9	1951.5	1691.4	1452.8	1275.8	1174.5	1138.4	1123.9	1149.2	1181.8	1257.6
52.5°	1897.3	1651.6	1384.2	1152.9	968.6	863.8	824.0	802.3	816.7	860.2	936.0
55°	1568.5	1340.8	1098.6	860.2	683.0	585.5	538.4	524.0	538.4	585.5	661.4
57.5°	1239.6	1048.1	845.7	621.6	462.6	365.0	318.0	303.6	343.4	361.4	440.9
60°	968.6	813.2	639.7	455.4	318.0	242.1	195.2	184.3	202.4	234.9	300.0
62.5°	726.4	628.8	491.5	325.2	234.9	155.4	130.1	119.3	130.1	155.4	206.0
65°	527.7	451.8	343.4	238.5	159.0	115.7	86.7	79.5	90.4	108.4	151.8
67.5°	361.4	303.6	238.5	166.2	108.4	72.2	61.5	61.5	65.1	79.5	112.0
70°	234.9	198.8	151.8	108.4	72.2	54.2	47.0	39.8	47.0	57.8	75.9
72.5°	148.2	126.5	97.5	75.9	54.2	39.8	32.5	28.9	36.2	43.3	57.8
75°	90.4	68.7	50.6	39.8	28.9	28.9	28.9	14.4	18.0	28.9	36.2
77.5°	54.2	47.0	39.8	32.5	25.3	14.4	14.4	14.4	18.0	21.7	32.5
80°	28.9	25.3	18.0	18.0	14.4	10.9	14.4	10.9	7.3	18.0	21.7
82.5°	18.0	14.4	14.4	14.4	18.0	7.3	10.9	7.3	10.9	14.4	10.9
85°	10.9	10.9	10.9	7.3	18.0	7.3	7.3	3.6	3.6	7.3	7.3
87.5°	0.0	3.6	3.6	0.0	3.6	0.0	3.6	3.6	3.6	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P248367

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDWOLI

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8	6808.8
2.5°	6819.7	6816.0	6819.7	6816.0	6816.0	6816.0	6819.7	6819.7	6816.0	6816.0	6823.3
5°	6848.6	6848.6	6848.6	6845.0	6841.3	6841.3	6848.6	6848.6	6837.7	6848.6	6848.6
7.5°	6910.0	6899.2	6910.0	6895.5	6888.4	6891.9	6895.5	6888.4	6881.1	6884.7	6884.7
10°	6989.5	6978.7	6978.7	6967.9	6957.0	6949.7	6942.6	6924.5	6906.4	6902.8	6888.4
12.5°	7083.4	7065.4	7054.6	7032.9	7014.8	6989.5	6967.9	6939.0	6902.8	6877.5	6852.2
15°	7177.4	7148.5	7123.2	7087.1	7047.4	7004.0	6957.0	6910.0	6852.2	6801.6	6758.2
17.5°	7253.3	7213.6	7166.6	7108.8	7051.0	6985.9	6917.3	6848.6	6765.5	6700.4	6649.8
20°	7278.6	7220.9	7159.4	7083.4	7007.6	6917.3	6830.5	6740.2	6646.2	6577.5	6519.7
22.5°	7246.2	7177.4	7101.6	7022.1	6920.8	6823.3	6722.1	6617.2	6534.1	6440.2	6386.0
25°	7155.8	7072.7	6989.5	6895.5	6798.0	6689.6	6581.2	6472.8	6371.5	6320.9	6252.3
27.5°	6971.5	6881.1	6790.7	6693.2	6581.2	6472.8	6360.7	6255.8	6169.2	6100.5	6060.8
30°	6646.2	6541.4	6436.6	6331.8	6234.2	6122.1	6017.3	5930.6	5843.8	5789.6	5749.9
32.5°	6147.4	6053.5	5948.7	5847.5	5757.2	5663.2	5576.4	5500.6	5439.1	5402.9	5374.0
35°	5475.3	5381.3	5301.8	5229.5	5153.6	5113.9	5059.7	5016.2	4990.9	4976.5	4972.9
37.5°	4629.5	4575.3	4550.0	4535.6	4521.1	4510.3	4517.5	4535.6	4550.0	4575.3	4604.2
40°	3726.1	3773.0	3787.5	3838.1	3885.1	3946.5	4015.2	4094.7	4159.7	4242.8	4300.7
42.5°	2902.1	2988.8	3090.0	3198.4	3314.1	3426.1	3563.4	3689.9	3805.6	3910.3	4000.7
45°	2229.8	2363.5	2515.4	2670.7	2826.2	2988.8	3155.1	3310.4	3447.8	3559.8	3653.8
47.5°	1738.3	1886.5	2081.7	2273.2	2461.2	2652.7	2837.0	2999.6	3115.3	3223.7	3306.8
50°	1376.9	1546.8	1760.0	1980.5	2186.5	2388.8	2584.0	2735.8	2851.5	2938.2	2999.6
52.5°	1066.1	1268.5	1485.3	1716.7	1937.1	2157.6	2338.2	2479.2	2573.2	2649.1	2696.0
55°	795.1	993.9	1225.2	1463.7	1687.8	1901.0	2070.8	2193.8	2276.9	2320.2	2345.5
57.5°	574.6	755.4	986.6	1225.2	1427.5	1629.9	1767.3	1879.3	1926.3	1951.5	1962.4
60°	419.2	585.5	791.4	997.5	1189.0	1351.6	1470.9	1546.8	1583.0	1597.4	1593.8
62.5°	307.2	451.8	628.8	802.3	957.7	1091.4	1185.4	1236.0	1254.1	1261.3	1250.5
65°	234.9	346.9	498.7	632.4	751.7	849.3	918.0	950.5	961.3	957.7	950.5
67.5°	173.5	260.2	372.3	473.4	560.2	636.1	672.2	701.2	708.3	697.5	686.7
70°	122.9	191.5	271.0	339.7	404.7	448.2	487.9	491.5	491.5	487.9	480.7
72.5°	86.7	133.7	184.3	231.3	271.0	303.6	318.0	328.9	325.2	321.6	314.5
75°	57.8	83.1	133.7	144.6	180.7	191.5	206.0	206.0	209.6	198.8	198.8
77.5°	36.2	57.8	79.5	94.0	108.4	122.9	130.1	130.1	133.7	130.1	130.1
80°	21.7	36.2	43.3	65.1	65.1	75.9	79.5	83.1	75.9	86.7	75.9
82.5°	14.4	21.7	32.5	32.5	39.8	47.0	47.0	50.6	50.6	47.0	47.0
85°	10.9	14.4	18.0	21.7	21.7	25.3	21.7	21.7	25.3	28.9	25.3
87.5°	3.6	7.3	3.6	7.3	7.3	14.4	10.9	10.9	10.9	14.4	14.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P248367

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDWOLI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	6808.8	6808.8	6808.8	6808.8
2.5°	6816.0	6819.7	6816.0	6816.0
5°	6848.6	6845.0	6848.6	6841.3
7.5°	6873.9	6873.9	6870.2	6870.2
10°	6873.9	6859.5	6859.5	6859.5
12.5°	6819.7	6801.6	6790.7	6783.5
15°	6725.7	6693.2	6678.7	6675.1
17.5°	6602.8	6573.9	6555.9	6545.0
20°	6461.9	6433.0	6411.3	6414.9
22.5°	6339.0	6306.5	6292.0	6284.8
25°	6216.1	6176.3	6165.6	6158.3
27.5°	6017.3	5995.7	5984.8	5974.0
30°	5713.8	5702.9	5684.9	5710.1
32.5°	5363.2	5345.1	5330.7	5341.6
35°	4976.5	4965.7	4976.5	4969.3
37.5°	4622.4	4633.2	4647.7	4654.8
40°	4344.1	4383.8	4398.3	4405.5
42.5°	4065.8	4112.8	4141.7	4159.7
45°	3722.4	3769.4	3801.9	3823.7
47.5°	3368.3	3408.1	3440.5	3437.0
50°	3046.7	3068.3	3082.7	3097.2
52.5°	2721.3	2721.3	2724.9	2724.9
55°	2352.7	2345.5	2341.9	2345.5
57.5°	1947.9	1940.8	1937.1	1926.3
60°	1579.3	1557.7	1543.2	1543.2
62.5°	1236.0	1210.7	1199.9	1196.3
65°	928.8	925.1	903.5	899.9
67.5°	672.2	657.7	643.3	646.9
70°	473.4	451.8	451.8	444.5
72.5°	307.2	296.3	292.7	292.7
75°	191.5	191.5	184.3	198.8
77.5°	126.5	126.5	122.9	126.5
80°	75.9	75.9	75.9	72.2
82.5°	47.0	50.6	47.0	47.0
85°	25.3	28.9	21.7	32.5
87.5°	14.4	18.0	14.4	18.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)